



## TRANSPORTATION CABINET

Frankfort, Kentucky 40622  
www.transportation.ky.gov/

**Steven L. Beshear**  
Governor

**Michael W. Hancock, P.E.**  
Acting Secretary

November 4, 2009

Attn: William James (CELRN-OR-F)  
Department of the Army  
Nashville District, Corps of Engineers  
Eastern Regulatory Section  
3701 Bell Road  
Nashville, Tennessee 37214

Attn: Mr. Alan Grant  
Kentucky Division of Water  
200 Fair Oaks  
Frankfort, Kentucky 40601

Subject: **Application for Section 404 Nationwide Permit &  
Section 401 Water Quality Certification  
Kentucky 61 Relocation Project  
Cumberland County, Kentucky  
KYTC Item No: 8-158.10**

Dear Mr. James and Mr. Grant:

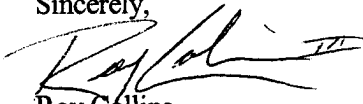
The Kentucky Transportation Cabinet respectfully submits this Application for a Section 404 Nationwide Permit & Section 401 Water Quality Certification for the proposed Kentucky Highway 61 relocation project in Cumberland County, Kentucky.

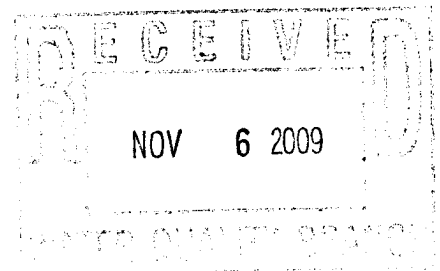
**Section 106** of the National Historic Preservation Act has been addressed through consultation with the KY SHPO. This project is state-funded and, as such, the KYTC has attempted to address issues related to the NHPA. Attached for your consideration is a copy of the Memorandum of Agreement, signed by KYTC and the SHPO to mitigate for adverse effects created by the undertaking.

**Section 7** of the Endangered Species Act (ESA) will be addressed through consultation with the US Fish and Wildlife Service. This project is state funded and, as such, the KYTC will attempt to address issues related to the ESA. Attached for your consideration is a copy of the endangered species list for Cumberland County, provided by USFWS, and correspondence from the USFWS that indicates that the project is Not Likely To Adversely Affect any federally listed endangered species will be provided to your office upon receipt.

Enclosed you should find all necessary information in order to make a permit determination. If anything is missing that you need to assist you or you have any questions please contact me by email [RoyC.Collins@ky.gov](mailto:RoyC.Collins@ky.gov) or by phone 502-564-7250.

Sincerely,

  
Roy Collins  
Permit Coordinator



An Equal Opportunity Employer M/F/D

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT  
(33 CFR 325)

OMB APPROVAL NO. 0710-0003  
Expires December 31, 2004

The public reporting burden for this collection of information is estimated to average 10 hours per response, although the majority of applications should require 5 hours or less. This includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Service Directorate of Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302; and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003), Washington, DC 20503. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies. Submission of requested information is voluntary, however, if information is not provided, the permit application cannot be processed nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETED
--------------------	----------------------	------------------	-------------------------------

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME KY Transportation Cabinet Department of Highways	8. AUTHORIZED AGENT'S NAME AND TITLE (an agent is not required) Roy Collins, Permits Coordinator
6. APPLICANT'S ADDRESS Kentucky Transportation Office Building 200 Mero Street Frankfort, Kentucky 40622	9. AGENT'S ADDRESS Division of Environmental Analysis KY Transportation Office Bldg, Station W5-22-02 200 Mero Street, Frankfort, Kentucky 40622
7. APPLICANT'S PHONE NUMBERS WITH AREA CODE a. Residence b. Business (502) 564-3730	10. AGENT'S PHONE NUMBERS WITH AREA CODE a. Residence b. Business (502) 564-7250

11. STATEMENT OF AUTHORIZATION

I hereby authorize Roy Collins to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

*[Signature]*  
APPLICANT'S SIGNATURE

11/4/09  
DATE

NAME, LOCATION AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE (see instructions) KY 61	14. PROJECT STREET ADDRESS (if applicable) N/A
13. NAME OF WATERBODY, IF KNOWN (if applicable) UTs - LEWIS CREEK, BIG RENOX CREEK	
15. LOCATION OF PROJECT CUMBERLAND KY COUNTY STATE	

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions)

Project begins in Burkesville city limits, continuing north on KY 61, and terminating at the intersection of KY 704.

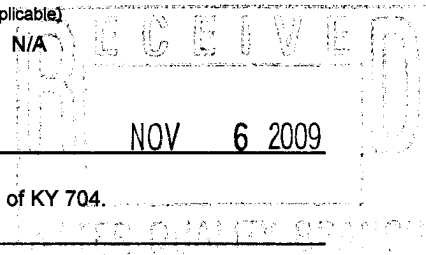
17. DIRECTIONS TO THE SITE

Northern city limits of Burkesville on KY 61.

ENG FORM 4345, Jul 97

EDITION OF SEP 94 IS OBSOLETE

(Proponent: CECW-OR)



18. Nature of Activity (Description of project, include all features)

The construction of the KY 61 involves the placement of 11 culverts, the relocation or filling of 7 streams, the filling of 2.59 ac of one wetland, and the filling of one man-made open water pond.

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

See Attachment

USE BLOCKS 20-22 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

To necessitate the construction of KY 61, the placement of culverts and the relocation of several sections of streams are required.

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards

The material will be native rock and soils from the project site. Approximately 500 CY of rock will be placed for the stream relocations and culvert placements.

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Roadway fill = 3.27 acres. See "Summary" sheets for individual site acreages.

23. Is Any Portion of the Work Already Complete? Yes ☐ No ☒ IF YES, DESCRIBE THE COMPLETED WORK

24. Addresses of Adjoining Property Owners, Lessees, etc., Whose Property Adjoins the Waterbody (if more than can be entered here, please attach a supplemental list).

See Attachment

25. List of Other Certifications or Approvals/Denials Received from other Federal, State, or Local Agencies for Work Described in This Application

AGENCY	TYPE APPROVAL *	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED

\*Would include but is not restricted to zoning, building and flood plain permits

26. Application is hereby made for a permit or permits to authorize the work described in this application. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

  
SIGNATURE OF APPLICANT

  
DATE

  
SIGNATURE OF AGENT

  
DATE

The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States, knowingly and willfully falsifies, conceals, or covers up any trick scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

**Attachment Block 19**

**Cumberland County  
KY 61 reconstruction  
Item No. 8-158.10**

**Project Purpose:**

The purpose of the project is to reduce current and future traffic congestion, correct existing roadway deficiencies, and provide for acceptable access management, in order to facilitate the safe and efficient movement of people and goods along this section of KY 61 in Cumberland County.

**Attachment Block 24**

**Cumberland County  
KY 61 reconstruction  
Item No. 8-158.10**

Talbott Smith	55-7-14-16
Service Station, Malcolm Johnson 916 N. Main St. Burkesville, KY 42717-8996 (270)864-2214	55-7-12-3
Raymond A. Reneau Albany, KY 42602 (606)387-6162	55-7-13-5
Randall C. Wray	55-7-13-4, 4.01
Malcolm Johnson 916 N. Main St. Burkesville, KY 42717-8996 (270)864-2214	55-7-12-4; 55-7-11-1
Church	55-7-12-7
Harold E. Barnes Burkesville, KY 42717	55-7-13-2
Raymond D. Fletcher Columbia, KY 42728 (270)384-1982	55-7-10-15
Inis Pierce Burkesville, KY 42717	55-7-11-2
Michael Muse Burkesville, KY 42717	55-7-11-4

Timothy A. and Tina Davidson  
1101 N. Main St.  
Burkesville, KY 42717-8961  
(270)864-4125

Donald Daniels 55-7-11-6  
Garmon Ferry Rd  
Burkesville, KY 42717-8961  
(270)864-4349

W.K. Norris 55-7-12-8  
970 Garmon Ferry Rd  
Burkesville, KY 42717-9102  
(270)864-3473

Gay Easter 55-7-11-19,18,16  
169 Garmon Ferry Rd  
Burkesville, KY 42717-9102  
(270)864-5613

Gary Morgan 55-7-12-9  
1398 Columbia Rd  
Burkesville, KY 42717  
(270)864-5622

Commonwealth  
of Kentucky

Helen Rowe 55-7-12-11  
301 S. Main St  
Burkesville, KY 42717-9625  
(270)864-3768

Tim Hicks  
296 Garmon Ferry Rd  
Burkesville, KY 42717-9000  
(270)864-2615

B.F. Taylor 55-7-11-14

Willa Hicks Smith 55-7-11-13  
301 Garmon Ferry Road  
Burkesville, KY

Jerry L. Willis 311 Garmon Ferry Rd Burkesville, KY 42717-9103 (270)864-3345	54-8-2.2
Bradford W. Perdue 415 Garmon Ferry Rd Burkesville, KY 42717-9194 (270)864-9334	54-8-21
Stella B. Smith	54-8-21.01
Claywell Construction Company	54-58
Joe A. Strange	54-8-22.01
Samuel L. Rice 349 Keen St Burkesville, KY 42717 (270)864-5102	54-8-1.01
Malcolm Carter 219 Scotts Ferry Road Burkesville, KY (270)864-2200	54-56
Gary D. Morgan 1398 Columbia Road Burkesville, KY 42717 (270)864-5622	54-37
Carlos F. Taylor 589 Green Creek Dr Glasgow, KY 42141 (270)678-5394	54-37.01
Maxine Riddle Columbia Road Burkesville, KY	54-21
Bennie Smith 2830 Columbia Road Burkesville, KY	54-23 & 54-23.01

Sarah Anderson 53-47  
3870 Columbia Road  
Burkesville, KY

Kathy Flowers 53-46

Randal and 53-45  
Kathy Flowers

## SUMMARY OF SECTION 404 IMPACTS

Cumberland County  
KY 61,  
Item No. 8-158.10

### Impacts By Proposed KY 61 To Streams

[Please note: Impacts are arranged below in the order that the sites occur moving along the project from south to north.]

1. **Site STA 70+65**– Construct roadway impacting **256'** of an U.T. Lewis Creek at approximate location STA 70+65, latitude N 36.804051, longitude E -85.361804. After construction this portion of the stream will be conveyed through 246' of culvert and inlet/outlet channel to connect the water flow. Field investigations indicate this stream is **intermittent** in nature with a watershed of 396.8 acres. The impact to the water is **0.072 acres**. (Nationwide 14)
2. **Site STA 94+90**– Construct roadway impacting **131'** of an U.T. Lewis Creek at approximate location STA 94+90, latitude N 36.809817, longitude E -85.365792. This portion of the stream will be filled with excavated material and replaced with 80' of constructed channel to connect the water flow. Field investigations indicate this stream is **ephemeral** in nature with a watershed of 4.4 acres. The impact to the water is **0.007 acres**. (Nationwide 14)
3. **Site STA 96+71** – Construct roadway will **not** impact Lewis Creek at approximate location STA 96+71, latitude N 36.810228, longitude E -85.366127. This stream will be **bridged**. Field investigations indicate this stream is **perennial** in nature with a watershed of 1,427.2 acres. The impact to the water is **0 acres**. (No permit required)
4. **Site STA 102+90** – Wetland impact; see below.
5. **Site STA 103+75** – Construct roadway impacting **402'** of an U.T. Lewis Creek at approximate location STA 103+75 and STA 51+50, latitude N 36.811623, longitude E -85.367356. After construction two portions of the stream will be conveyed through 445' of 2 culverts and inlet/outlet channel to

connect the water flow. Field investigations indicate this stream is **intermittent** in nature with a watershed of 346.0 acres. The impact to the water is **0.108 acres**. (Nationwide 14)

6. **Site STA 109+56** – Construct roadway impacting **160'** of an U.T. Lewis Creek at approximate location STA 109+56, latitude N 36.813125, longitude E -85.368607. This portion of the stream will be filled with excavated material and replaced with 160' of constructed channel to connect the water flow. Field investigations indicate this stream is **ephemeral** in nature with a watershed of **17.8 acres**. The impact to the water is **0.014 acres**. (Nationwide 14)
7. **Site STA 113+36** – Construct roadway impacting **112'** of an U.T. Lewis Creek at approximate location STA 113+36, latitude N 36.814094, longitude E -85.369171. This portion of the stream will be filled with excavated material and replaced with 115' of constructed channel to connect the water flow. Field investigations indicate this stream is **ephemeral** in nature with a watershed of 6.4 acres. The impact to the water is **0.007 acres**. (Nationwide 14)
8. **Site STA 115+48** – Construct roadway impacting **174'** of an U.T. Lewis Creek at approximate location STA 115+48, latitude N 36.814679, longitude E -85.370027. This portion of the stream will be filled with excavated material and replaced with 200' of constructed channel to connect the water flow. Field investigations indicate this stream is **ephemeral** in nature with a watershed of 0.04acres. The impact to the water is **0.001 acres**. (Nationwide 14)
9. **Site STA 119+98** – Construct roadway impacting **107'** of an U.T. to Lewis Creek at approximate location STA 119+98, latitude N 36.815638, longitude E -85.370229. This portion of the stream will be filled with excavated material and replaced with 110' of constructed channel to connect the water flow. Field investigations indicate this stream is **ephemeral** in nature with a watershed of 7.8 acres. The impact to the water is **0.007 acres**. (Nationwide 14)
10. **Site STA 123+94** – Construct roadway impacting **128'** of an U.T. to Lewis Creek at approximate location STA 123+94, latitude N 36.816629, longitude E -85.370399. This portion of the stream will be filled with excavated material and replaced with 130' of constructed channel to connect the water flow. Field investigations indicate this stream is **ephemeral** in nature with a watershed of 3.6 acres. The impact to the water is **0.006 acres**. (Nationwide 14)
11. **Site STA 125+45** – Construct roadway impacting **164'** of an U.T. to Lewis Creek at approximate location STA 125+45, latitude N 36.817134, longitude

E -85.370406. After construction this portion of the stream will be conveyed through 156' of culvert and inlet/outlet channel to connect the water flow. Field investigations indicate this stream is **ephemeral** in nature with a watershed of 35.4 acres. The impact to the water is **0.018 acres**. (Nationwide 14)

12. **Site STA 129+80** – Construct roadway impacting **143'** of an U.T. Lewis Creek at approximate location STA 129+80, latitude N 36.814679, longitude E -85.370027. After construction this portion of the stream will be conveyed through 147' of culvert and inlet/outlet channel to connect the water flow. Field investigations indicate this stream is **ephemeral** in nature with a watershed of 1.4 acres. The impact to the water is **0.005 acres**. (Nationwide 14)
13. **Site STA 131+60**– Construct roadway impacting **134'** of an U.T. Lewis Creek at approximate location STA 131+60, latitude N 36.81888309, longitude E -85.37002436. After construction this portion of the stream will be conveyed through 185' of culvert and inlet/outlet channel to connect the water flow. Field investigations indicate this stream is **ephemeral** in nature with a watershed of 1.2 acres. The impact to the water is **0.004 acres**. (Nationwide 14)
14. **Site STA 132+21** – Construct roadway impacting **126'** of an U.T. Lewis Creek at approximate location STA 132+21, latitude N 36.81895785, longitude E -85.37000271. After construction this portion of the stream will be filled with excavated material and replaced with 130' of constructed channel to connect the water flow. Field investigations indicate this stream is **ephemeral** in nature with a watershed of 3.2 acres. The impact to the water is **0.006 acres**. (Nationwide 14)
15. **Site STA 141+30** – Construct roadway impacting **144'** of an U.T. Lewis Creek at approximate location STA 141+30, latitude N 36.82140918, longitude E -85.36933346. After construction this portion of the stream will be conveyed through 292' of culvert and inlet/outlet channel to connect the water flow. Field investigations indicate this stream is **ephemeral** in nature with a watershed of 13.3 acres. The impact to the water is **0.011 acres**. (Nationwide 14)
16. **Site STA 144+50** – Construct roadway impacting **103'** of an U.T. Lewis Creek at approximate location STA 144+50, latitude N 36.82225666, longitude E -85.36909869. After construction this portion of the stream will be conveyed through 102' of culvert and inlet/outlet channel to connect the water flow. Field investigations indicate this stream is **ephemeral** in nature with a watershed of 5.2 acres. The impact to the water is **0.006 acres**. (Nationwide 14)

17. **Site STA 147+60** – Construct roadway impacting **115'** of an U.T. Lewis Creek at approximate location STA 147+60, latitude N 36.82308849, longitude E -85.36887286. After construction this portion of the stream will be conveyed through 293' of culvert and inlet/outlet channel to connect the water flow. Field investigations indicate this stream is **ephemeral** in nature with a watershed of 10.5 acres. The impact to the water is **0.008 acres**. (Nationwide 14)
18. **Site STA 148+60** – Construct roadway impacting **341'** of an U.T. Lewis Creek at approximate location STA 148+60, latitude N 36.82335056, longitude E -85.36879884. After construction this portion of the stream will be conveyed through 293' of culvert and inlet/outlet channel to connect the water flow. Field investigations indicate this stream is **ephemeral** in nature with a watershed of 4.1 acres. The impact to the water is **0.017 acres**. (Nationwide 14)
19. **Site STA 158+00** – Pond impact; see below.
20. **Site STA 169+00** – Construct roadway impacting **217'** of an U.T. Big Renox Creek at approximate location STA 169+00, latitude N 36.82902, longitude E -85.367911. After construction this portion of the stream will be conveyed through 135' of culvert and inlet/outlet channel to connect the water flow. Field investigations indicate this stream is **ephemeral** in nature with a watershed of 1.8 acres. The impact to the water is **0.008 acres**. (Nationwide 14)
21. **Site STA 170+53** – Construct roadway will **not** impact Big Renox Creek at approximate location STA 170+53, latitude N 36.829246, longitude E -85.368935. This stream will be **bridged**. Field investigations indicate this stream is **perennial** in nature with a watershed of 16,080 acres. The impact to the water is **0 acres**. (No permit required)

#### **Impacts By Proposed KY 61 To Man-Made Open-Water Ponds**

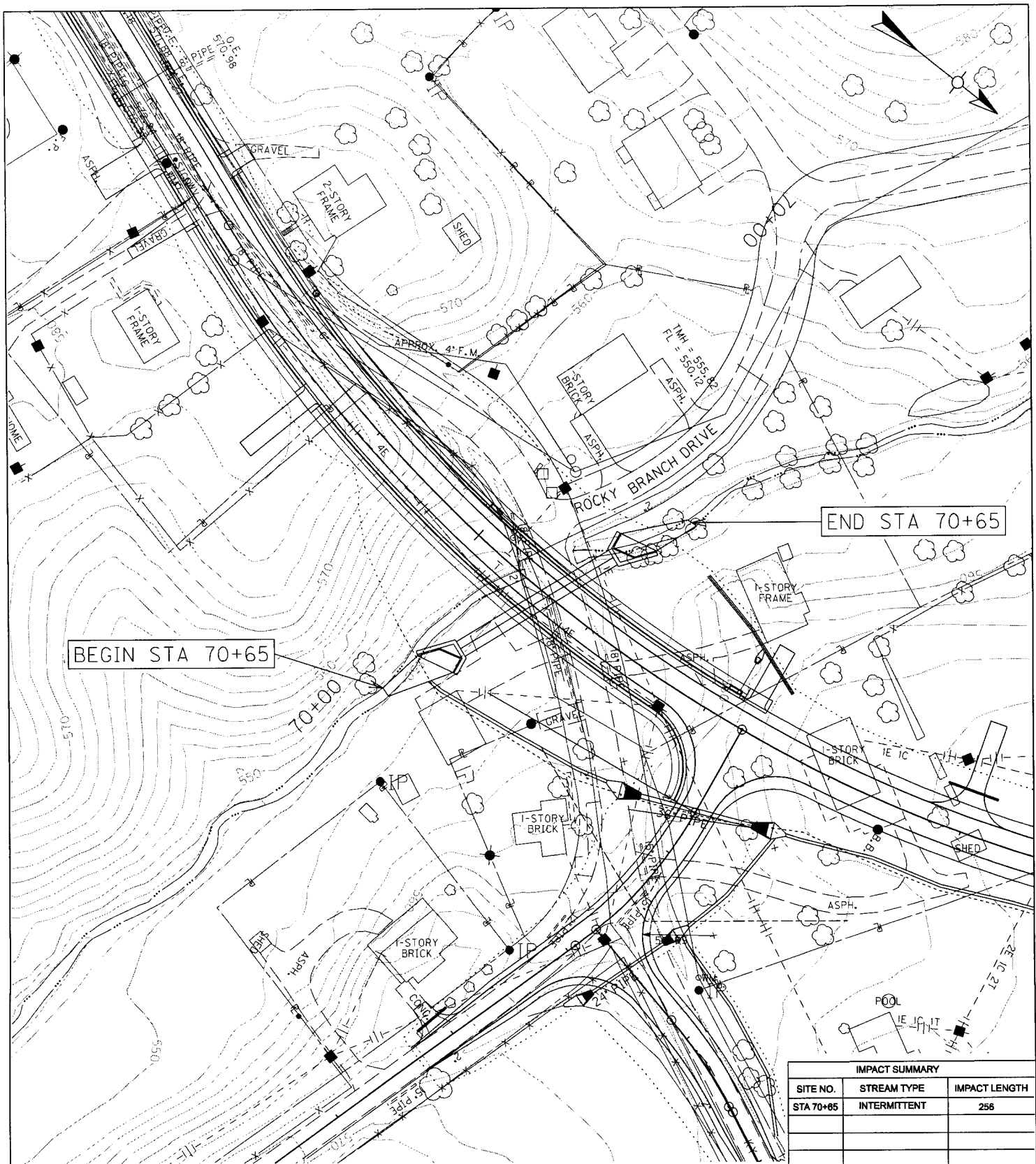
22. **Site STA 158+00** – Construct roadway impacting a 0.36 acre man-made open-water pond at approximate location STA 158+00, latitude N 36.825112, longitude E -85.368414. This pond will be filled with excavated material. It is estimated that this pond, when originally constructed, replaced **258'** of **ephemeral** stream. The estimated impact to that water is **0.017 acres**. (Nationwide 14)

#### **Impacts By Proposed KY 61 To Wetlands**

23. **Site STA 102+90** – Construct a controlled fill over **2.59 acres** of jurisdictional wetland near station 102+90, latitude N 36.812391, longitude E -85.368326. This emergent wetland is associated with an unnamed tributary

of Lewis Creek with a drainage area of approximately 42.5 acres. Mitigation will be in the form of an in-lieu fee payment of \$77,700.00. (Nationwide 14)





~NOTES~

Stream Impact STA 70+65

SCALE 1" = 100'

APPLICATION BY  
**KENTUCKY**  
 TRANSPORTATION CABINET  
 DEPARTMENT OF HIGHWAYS

STA 65+47 TO 74+54 IMPACT PLAN

PROPOSED ACTIVITIES:

**U.T. LEWIS CREEK**

**BURKESVILLE**

STREAM NAME:

AT OR NEAR:

**CUMBERLAND**

**KENTUCKY**

COUNTY OF:

STATE OF:

MILE POINT:

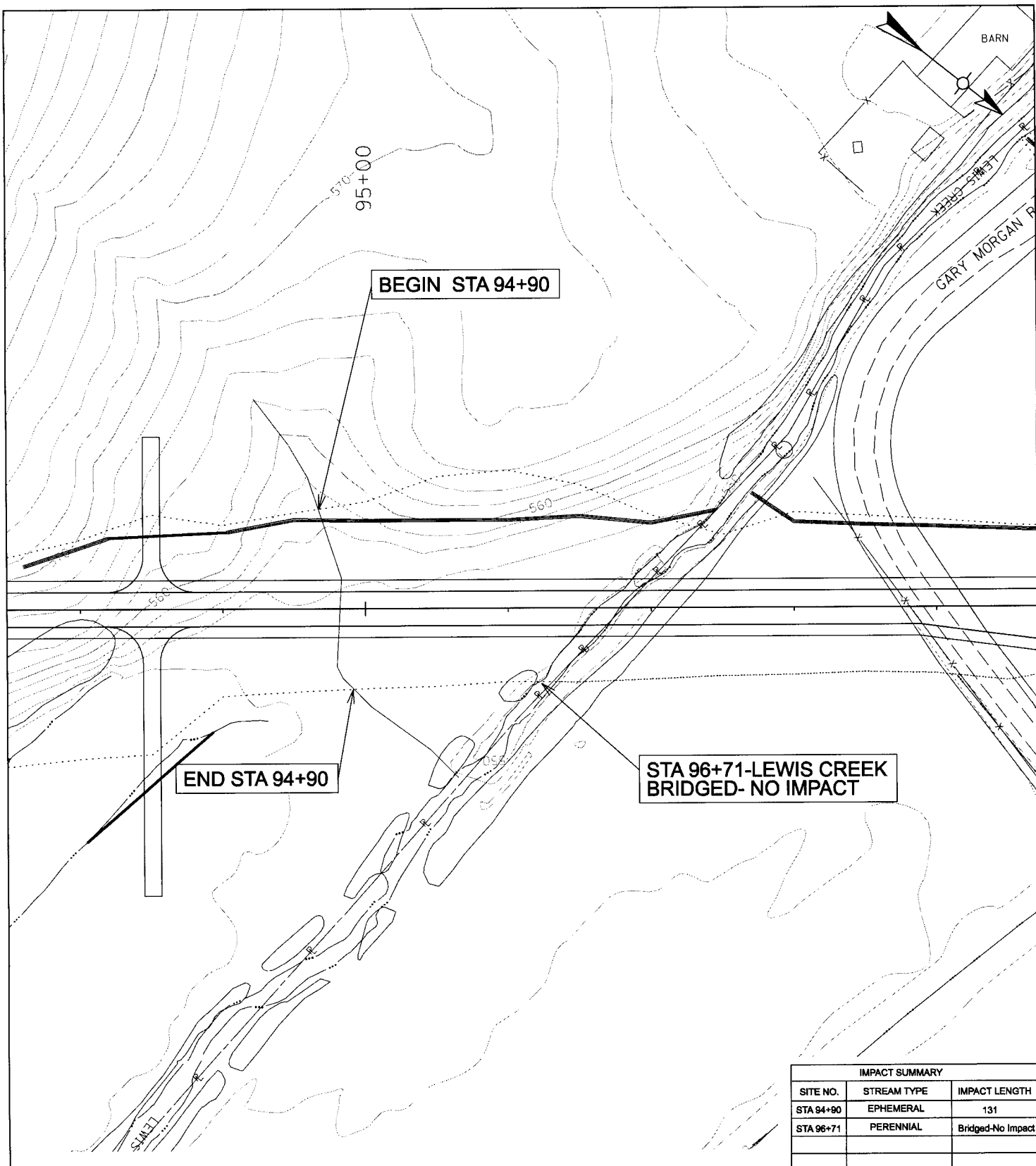
ITEM NO.:

8-158.10

2 of 21

SHEET NO.:

...PIPE SHEETS\PIPESHEET01.dgn 2/11/2009 3:02:49 PM



IMPACT SUMMARY		
SITE NO.	STREAM TYPE	IMPACT LENGTH
STA 94+90	EPHEMERAL	131
STA 96+71	PERENNIAL	Bridged-No Impact

~NOTES~

Stream Impact STA 94+90  
Stream Impact STA 96+71

SCALE 1" = 100'

APPLICATION BY  
**KENTUCKY**  
TRANSPORTATION CABINET  
DEPARTMENT OF HIGHWAYS

STA 92+50 TO 99+69 IMPACT PLAN

PROPOSED ACTIVITIES:

**U.T. LEWIS CREEK**

**BURKESVILLE**

STREAM NAME:

AT OR NEAR:

**CUMBERLAND**

**KENTUCKY**

COUNTY OF:

STATE OF:

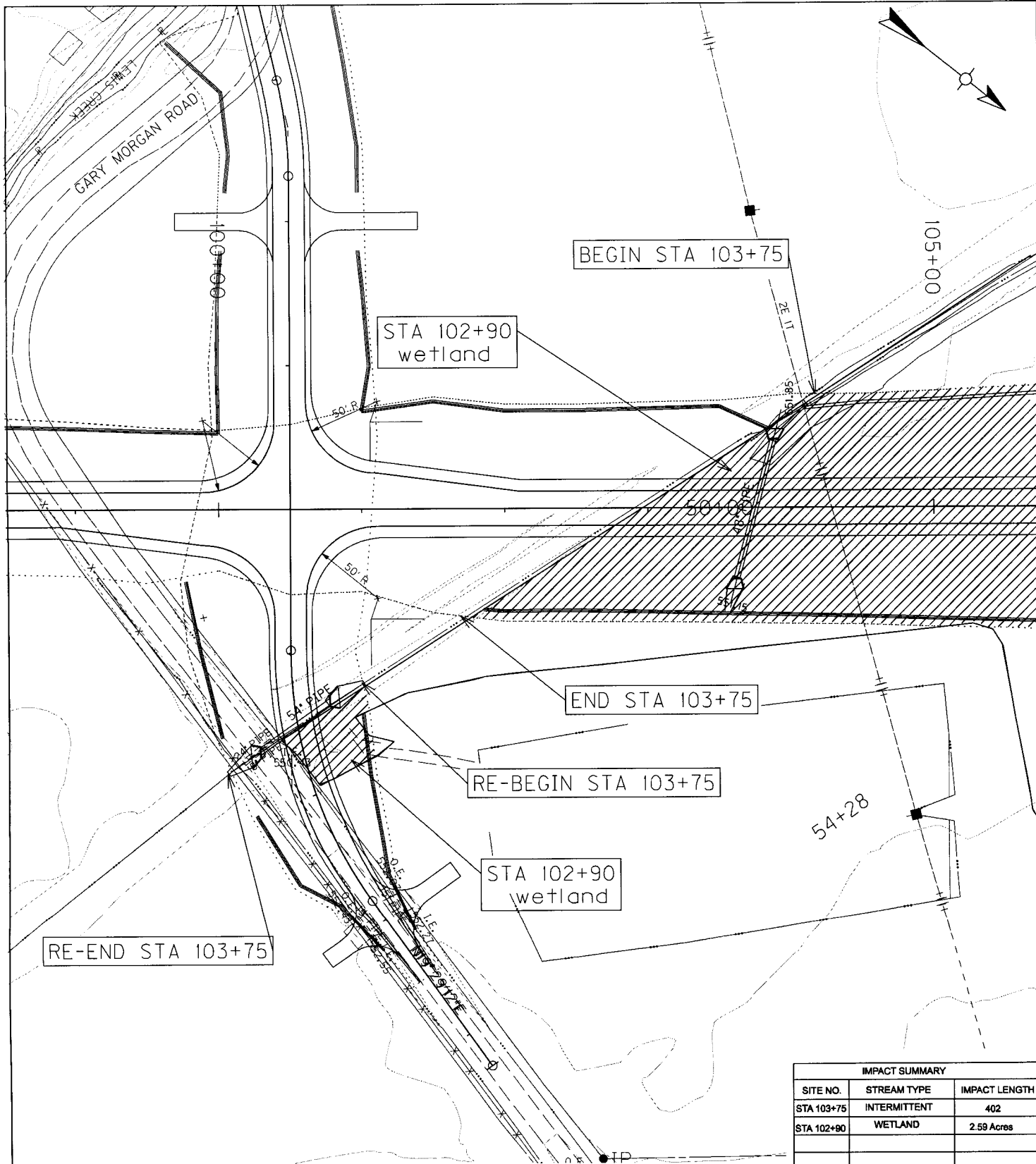
MILE POINT:

ITEM NO.:

8-158.10

SHEET NO.:

4 of 21



IMPACT SUMMARY		
SITE NO.	STREAM TYPE	IMPACT LENGTH
STA 103+75	INTERMITTENT	402
STA 102+90	WETLAND	2.59 Acres

~NOTES~

Stream Impact STA 103+75  
Wetland Impact STA 102+90

SCALE 1" = 100'

APPLICATION BY  
**KENTUCKY**  
**TRANSPORTATION CABINET**  
DEPARTMENT OF HIGHWAYS

STA 98+53 TO 105+74 IMPACT PLAN

PROPOSED ACTIVITIES:

**U.T. LEWIS CREEK**

**BURKESVILLE**

STREAM NAME:

AT OR NEAR:

**CUMBERLAND**

**KENTUCKY**

COUNTY OF:

STATE OF:

MILE POINT:

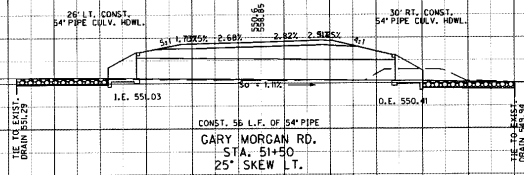
8-158.10

ITEM NO.:

5 of 21

SHEET NO.:

FLOOD DATA			
DESIGN	STORM	TRAFFIC	WIND
CHECK	NO.	NO.	NO.
100	100	100	100



~NOTES~

Stream Impact STA 103+75

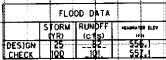
SCALE 1" = 10'

APPLICATION BY  
**KENTUCKY**  
TRANSPORTATION CABINET  
DEPARTMENT OF HIGHWAYS

STA 103+75 IMPACT PLAN

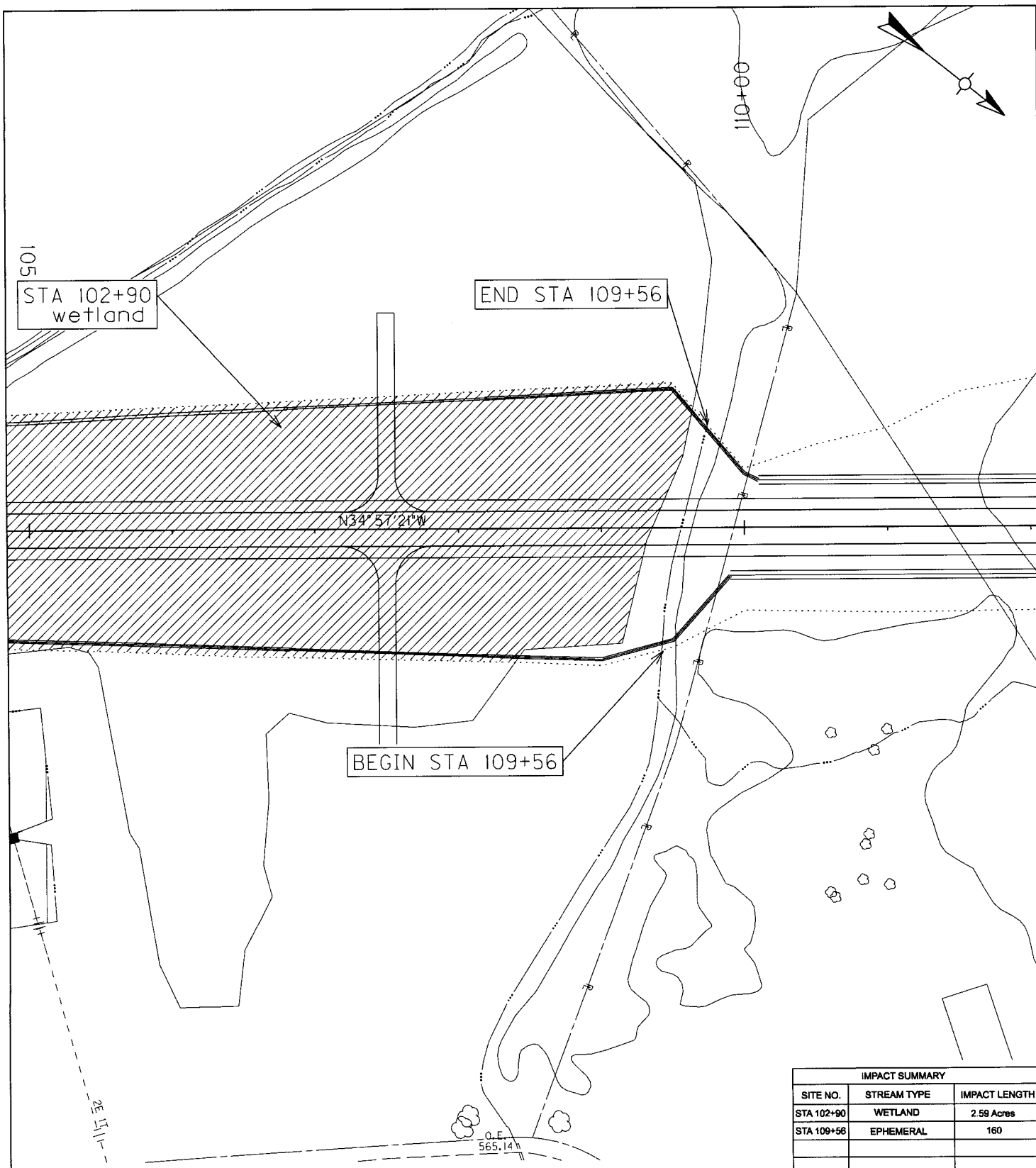
PROPOSED ACTIVITIES:

U.T. LEWIS CREEK		BURKESVILLE	
STREAM NAME:		AT OR NEAR:	
CUMBERLAND		KENTUCKY	
COUNTY OF:		STATE OF:	
		8-158.10	6 of 21
MILE POINT:	ITEM NO.:	SHEET NO.:	



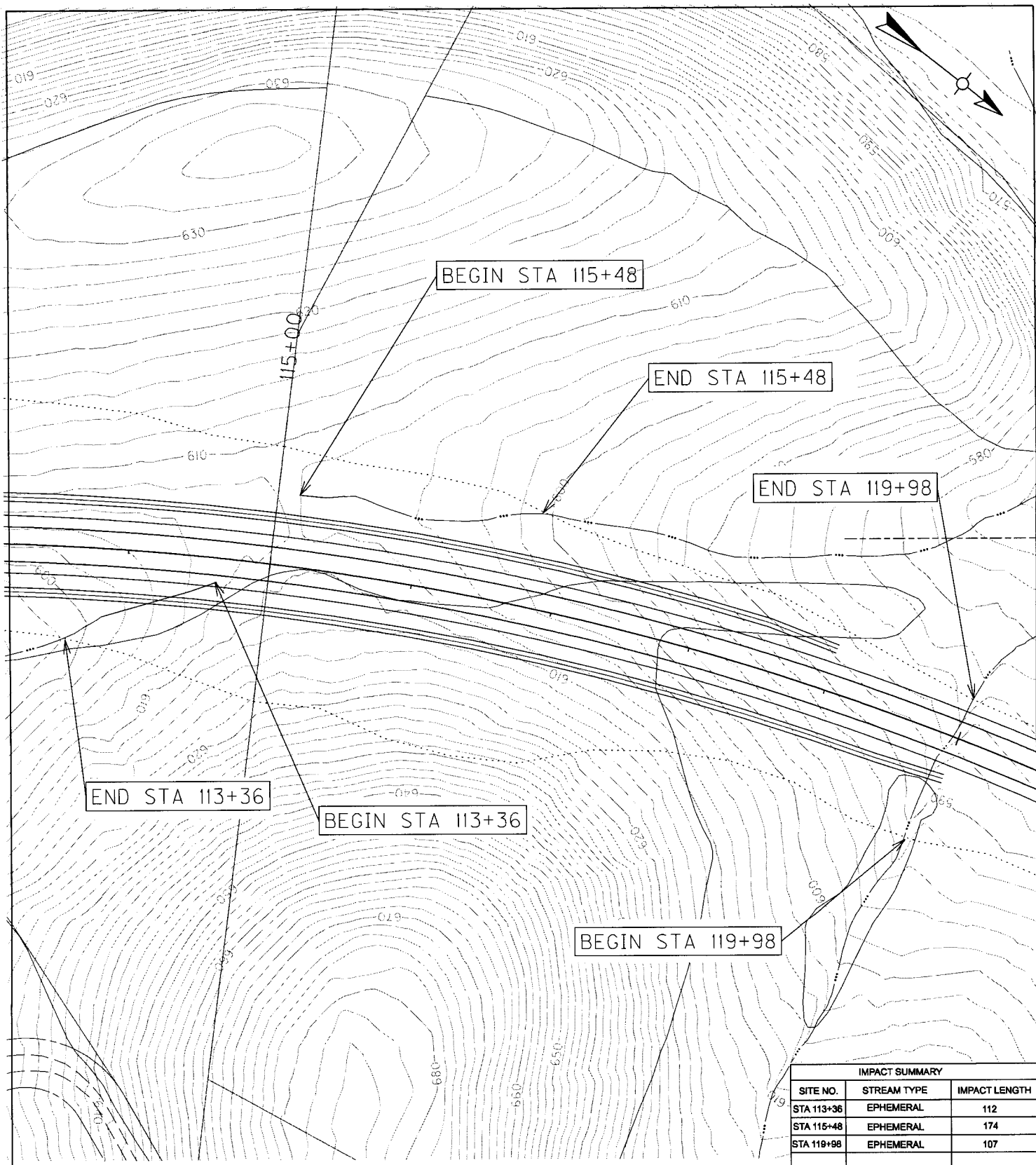
SCALE 1" = 10'

STA 103+75 IMPACT PLAN		
PROPOSED ACTIVITIES:		
U. T. LEWIS CREEK		BURKESVILLE
STREAM NAME:		AT OR NEAR:
CUMBERLAND		KENTUCKY
COUNTY OF:		STATE OF:
MILE POINT:	8-158.10	7 of 21
ITEM NO.:		SHEET NO.:



IMPACT SUMMARY		
SITE NO.	STREAM TYPE	IMPACT LENGTH
STA 102+90	WETLAND	2.59 Acres
STA 109+56	EPHEMERAL	160

<p align="center">~NOTES~</p> <p>Wetland Impact STA 102+90 Stream Impact STA 109+56</p> <p align="center">SCALE 1" = 100'</p>	<p>APPLICATION BY</p> <p><b>KENTUCKY</b></p> <p><b>TRANSPORTATION CABINET</b></p> <p>DEPARTMENT OF HIGHWAYS</p>	<p>STA 104+85 TO 112+04 IMPACT PLAN</p>	
		<p>PROPOSED ACTIVITIES:</p>	
		<p><b>U.T. LEWIS CREEK</b></p>	<p><b>BURKESVILLE</b></p>
		<p>STREAM NAME: _____ AT OR NEAR: _____</p>	
		<p><b>CUMBERLAND</b> <b>KENTUCKY</b></p> <p>COUNTY OF: _____ STATE OF: _____</p>	
<p>MILE POINT: _____ ITEM NO.: <b>8-158.10</b> SHEET NO.: <b>8 of 21</b></p>			



IMPACT SUMMARY		
SITE NO.	STREAM TYPE	IMPACT LENGTH
STA 113+36	EPHEMERAL	112
STA 115+48	EPHEMERAL	174
STA 119+98	EPHEMERAL	107

~NOTES~

Stream Impact STA 113+36  
Stream Impact STA 115+48  
Stream Impact STA 119+98

SCALE 1" = 100'

APPLICATION BY  
**KENTUCKY**  
TRANSPORTATION CABINET  
DEPARTMENT OF HIGHWAYS

STA 113+15 TO 120+59 IMPACT PLAN

PROPOSED ACTIVITIES:

**U.T. LEWIS CREEK**

**BURKESVILLE**

STREAM NAME:

AT OR NEAR:

**CUMBERLAND**

**KENTUCKY**

COUNTY OF:

STATE OF:

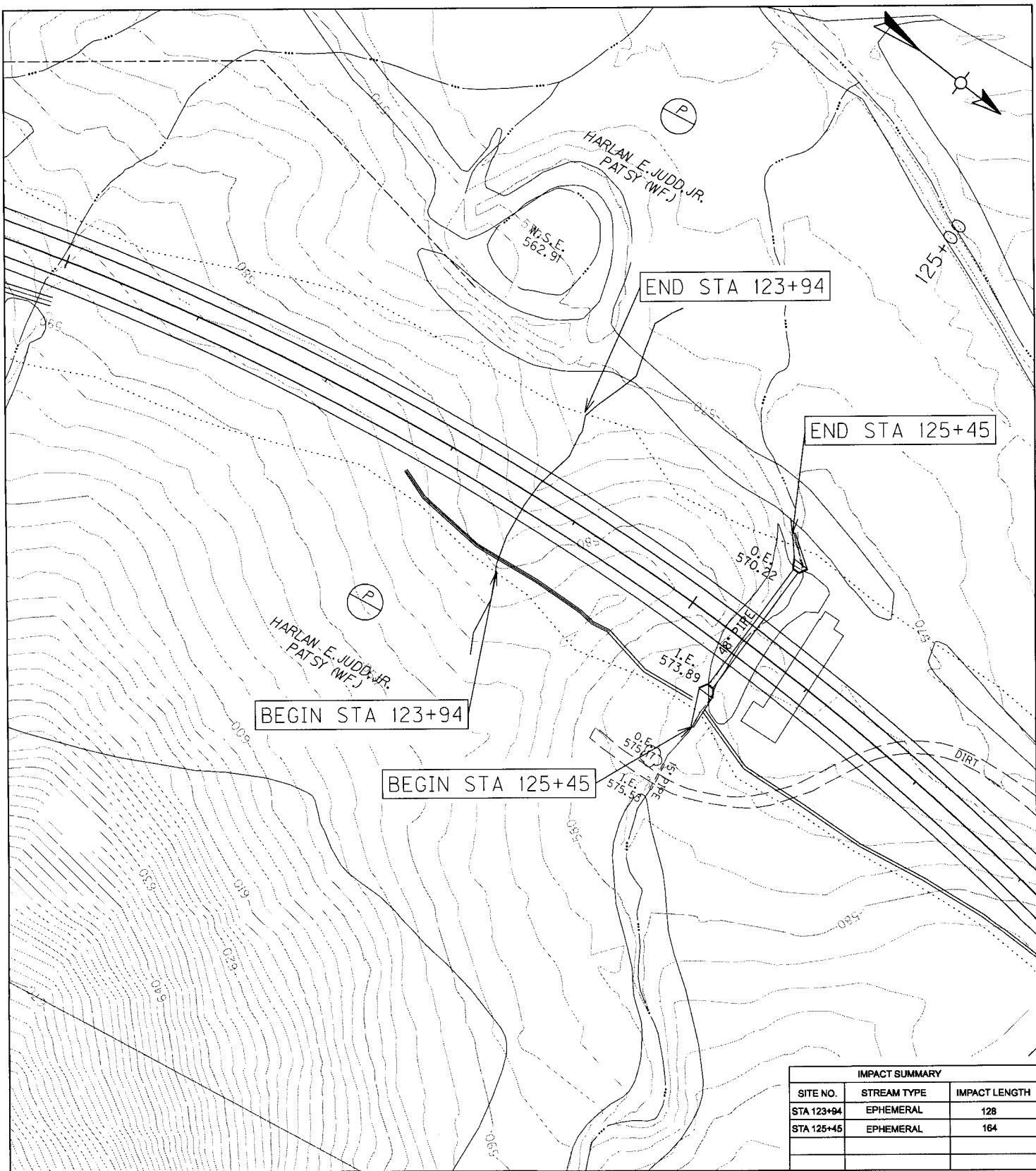
8-158.10

9 of 21

MILE POINT:

ITEM NO.:

SHEET NO.:



IMPACT SUMMARY		
SITE NO.	STREAM TYPE	IMPACT LENGTH
STA 123+94	EPHEMERAL	128
STA 125+45	EPHEMERAL	164

~NOTES~

Stream Impact STA 123+94  
Stream Impact STA 125+45

SCALE 1" = 100'

APPLICATION BY  
**KENTUCKY**  
TRANSPORTATION CABINET  
DEPARTMENT OF HIGHWAYS

STA 119+55 TO 128+13 IMPACT PLAN

PROPOSED ACTIVITIES:

**U.T. LEWIS CREEK** **BURKESVILLE**

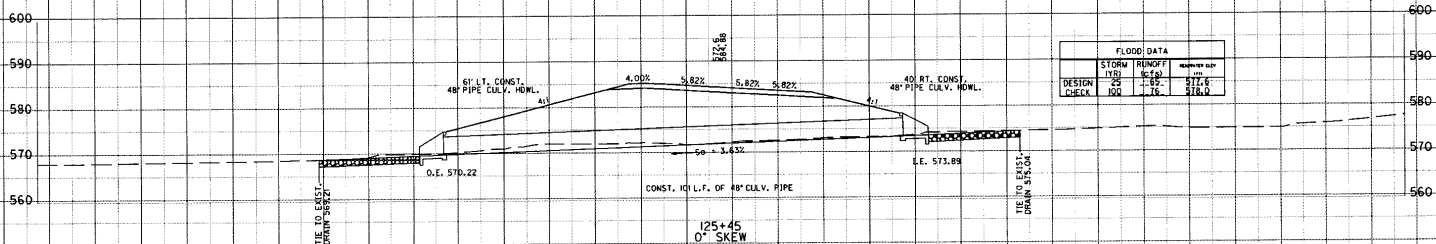
STREAM NAME: AT OR NEAR:

**CUMBERLAND** **KENTUCKY**

COUNTY OF: STATE OF:

MILE POINT: **8-158.10** **10 of 21**

ITEM NO.: SHEET NO.:



FLOOD DATA			
STORM	REINF.	DESIGN	REINF.
100	6.54	100	6.54
50	5.82	50	5.82
25	5.16	25	5.16

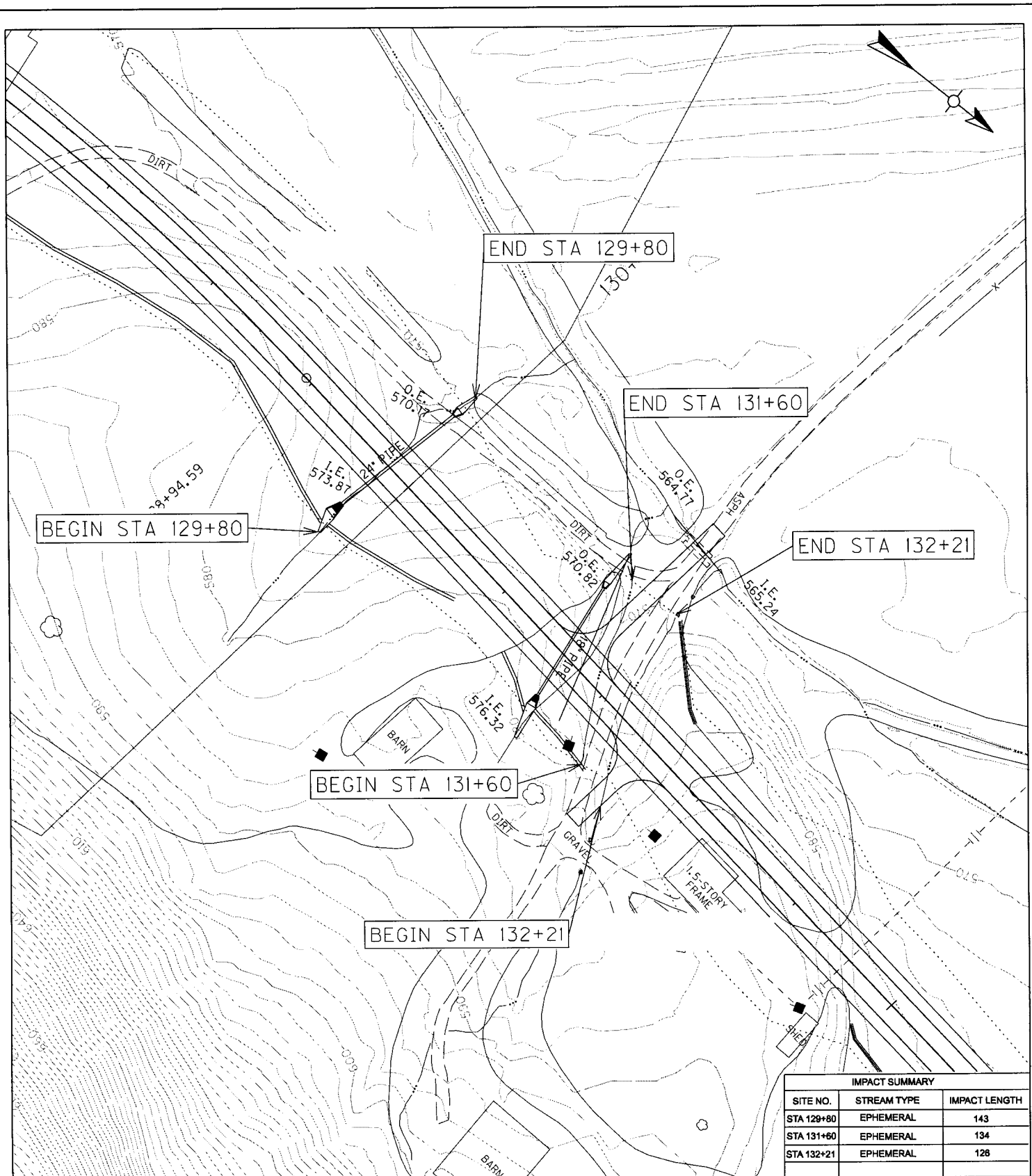
~NOTES~

Stream Impact STA 125+45

SCALE 1" = 10'

APPLICATION BY  
**KENTUCKY**  
TRANSPORTATION CABINET  
DEPARTMENT OF HIGHWAYS

STA 125+45 IMPACT PLAN	
PROPOSED ACTIVITIES:	
U.T. LEWIS CREEK	BURKESVILLE
STREAM NAME:	AT OR NEAR:
CUMBERLAND	KENTUCKY
COUNTY OF:	STATE OF:
MILE POINT:	8-158.10
ITEM NO.:	11 of 21
	SHEET NO.:



IMPACT SUMMARY		
SITE NO.	STREAM TYPE	IMPACT LENGTH
STA 129+80	EPHEMERAL	143
STA 131+60	EPHEMERAL	134
STA 132+21	EPHEMERAL	126

### ~NOTES~

Stream Impact STA 129+80  
Stream Impact STA 131+60  
Stream Impact STA 132+21

SCALE 1" = 100'

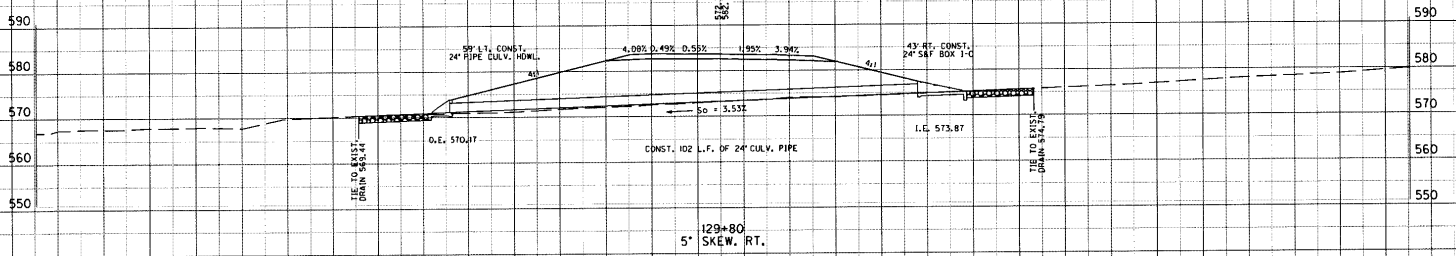
APPLICATION BY  
**KENTUCKY**  
TRANSPORTATION CABINET  
DEPARTMENT OF HIGHWAYS

STA 126+06 TO 135+65 IMPACT PLAN  
PROPOSED ACTIVITIES:

**U.T. LEWIS CREEK** **BURKESVILLE**  
STREAM NAME: AT OR NEAR:

**CUMBERLAND** **KENTUCKY**  
COUNTY OF: STATE OF:

**8-158.10** **12 of 21**  
MILE POINT: ITEM NO.: SHEET NO.:



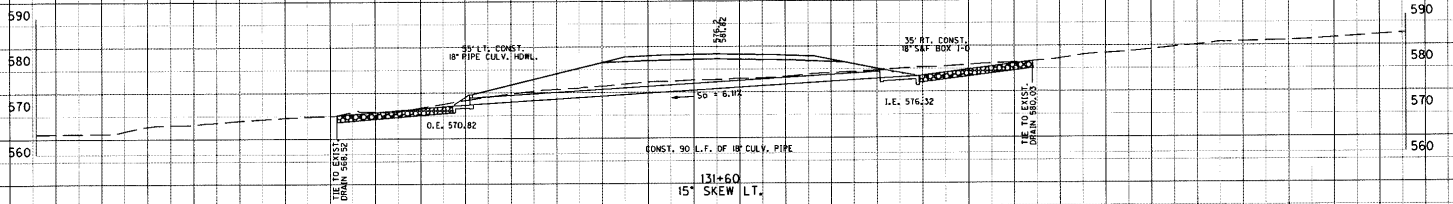
~NOTES~

Stream Impact STA 129+80

SCALE 1" = 10'

APPLICATION BY  
**KENTUCKY**  
TRANSPORTATION CABINET  
DEPARTMENT OF HIGHWAYS

STA 129+80 IMPACT PLAN		
PROPOSED ACTIVITIES:		
U.T. LEWIS CREEK	BURKESVILLE	
STREAM NAME:	AT OR NEAR:	
CUMBERLAND	KENTUCKY	
COUNTY OF:	STATE OF:	
MILE POINT:	8-158.10	13 of 21
	ITEM NO.:	SHEET NO.:



~NOTES~

Stream Impact STA 131+60

SCALE 1" = 10'

APPLICATION BY  
**KENTUCKY**  
TRANSPORTATION CABINET  
DEPARTMENT OF HIGHWAYS

STA 131+60 IMPACT PLAN

PROPOSED ACTIVITIES:

U.T. LEWIS CREEK  
STREAM NAME:

BURKESVILLE  
AT OR NEAR:

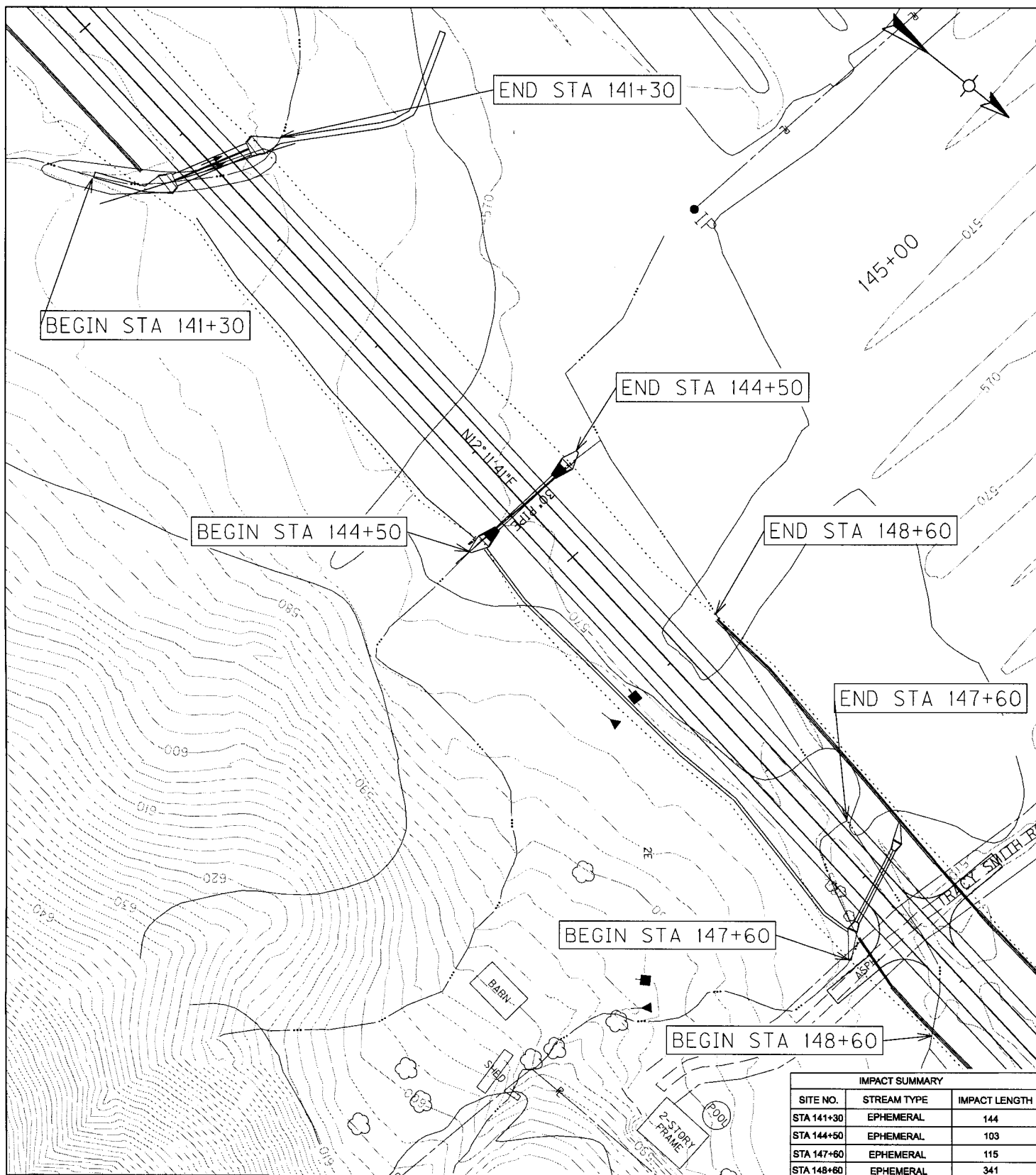
CUMBERLAND  
COUNTY OF:

KENTUCKY  
STATE OF:

MILE POINT:

8-158.10  
ITEM NO.:

14 of 21  
SHEET NO.:



IMPACT SUMMARY		
SITE NO.	STREAM TYPE	IMPACT LENGTH
STA 141+30	EPHEMERAL	144
STA 144+50	EPHEMERAL	103
STA 147+60	EPHEMERAL	115
STA 148+60	EPHEMERAL	341

### ~NOTES~

Stream Impact STA 141+30  
 Stream Impact STA 144+50  
 Stream Impact STA 147+60  
 Stream Impact STA 148+60

SCALE 1" = 100'

APPLICATION BY  
**KENTUCKY**  
 TRANSPORTATION CABINET  
 DEPARTMENT OF HIGHWAYS

### STA 139+81 TO 149+73 IMPACT PLAN

#### PROPOSED ACTIVITIES:

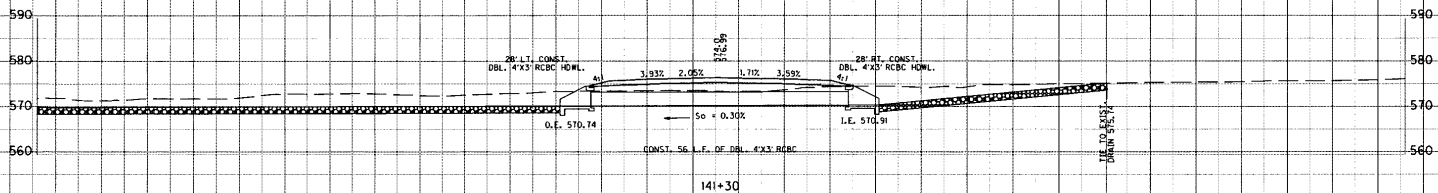
**U.T. LEWIS CREEK** **BURKESVILLE**

STREAM NAME: AT OR NEAR:

**CUMBERLAND** **KENTUCKY**

COUNTY OF: STATE OF:

MILE POINT: 8-158.10 15 of 21  
 ITEM NO.: SHEET NO.:



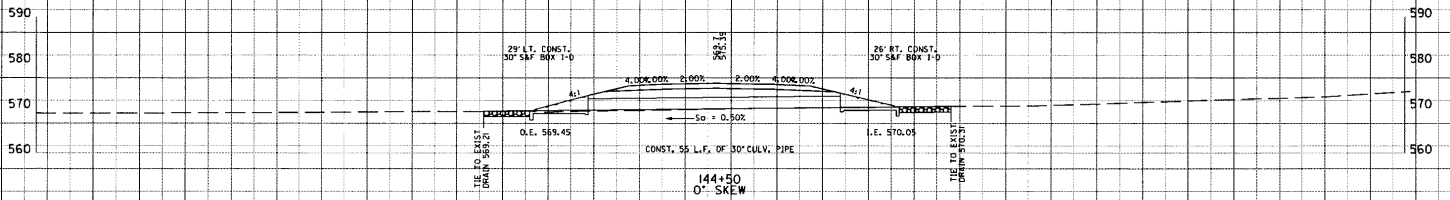
~NOTES~

Stream Impact STA 141+30

SCALE 1" = 10'

APPLICATION BY  
**KENTUCKY**  
TRANSPORTATION CABINET  
DEPARTMENT OF HIGHWAYS

STA 141+30 IMPACT PLAN	
PROPOSED ACTIVITIES:	
U. T. LEWIS CREEK	BURKESVILLE
STREAM NAME:	AT OR NEAR:
CUMBERLAND	KENTUCKY
COUNTY OF:	STATE OF:
MILE POINT:	8-158.10
ITEM NO.:	16 of 21
	SHEET NO.:



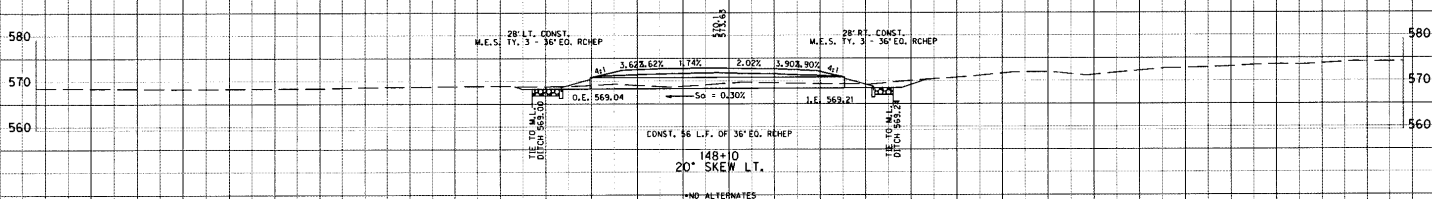
~NOTES~

Stream Impact STA 144+50

SCALE 1" = 10'

APPLICATION BY  
**KENTUCKY**  
TRANSPORTATION CABINET  
DEPARTMENT OF HIGHWAYS

STA 144+50 IMPACT PLAN		
PROPOSED ACTIVITIES:		
U.T. LEWIS CREEK	BURKESVILLE	
STREAM NAME:	AT OR NEAR:	
CUMBERLAND	KENTUCKY	
COUNTY OF:	STATE OF:	
MILE POINT:	8-158.10	17 of 21
ITEM NO.:	SHEET NO.:	



~NOTES~

Stream Impact STA 147+60  
Stream Impact STA 148+60

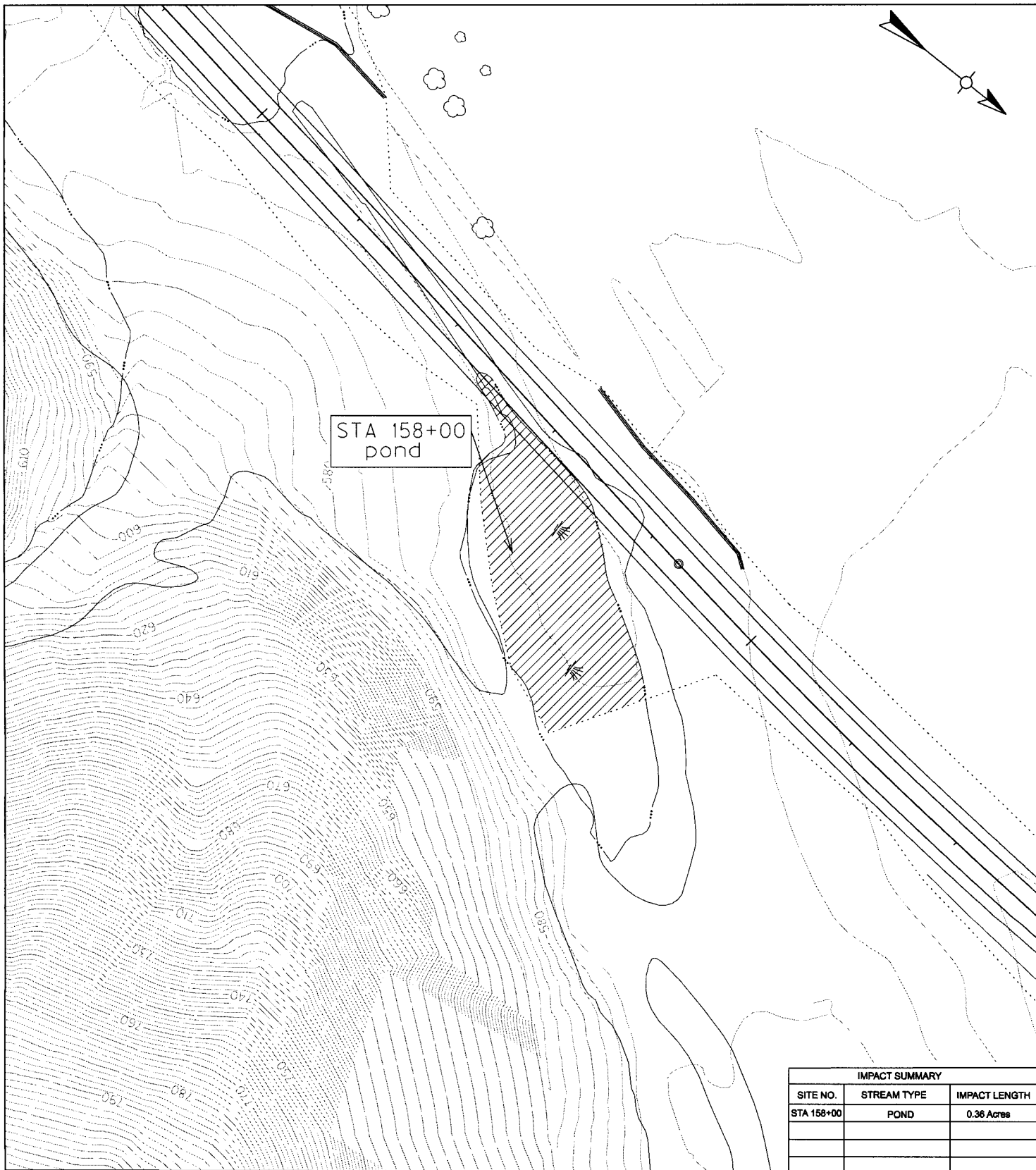
SCALE 1" = 10'

APPLICATION BY  
**KENTUCKY**  
TRANSPORTATION CABINET  
DEPARTMENT OF HIGHWAYS

STA 148+60 IMPACT PLAN

PROPOSED ACTIVITIES:

U.T. LEWIS CREEK	BURKESVILLE
STREAM NAME:	AT OR NEAR:
CUMBERLAND	KENTUCKY
COUNTY OF:	STATE OF:
MILE POINT:	ITEM NO.: 8-158.10
	SHEET NO.: 18 of 21



IMPACT SUMMARY		
SITE NO.	STREAM TYPE	IMPACT LENGTH
STA 158+00	POND	0.36 Acres

~NOTES~

STA 158+00 Pond Impact

SCALE 1" = 100'

APPLICATION BY

**KENTUCKY**

TRANSPORTATION CABINET

DEPARTMENT OF HIGHWAYS

STA 153+97 TO 162+75 IMPACT PLAN

PROPOSED ACTIVITIES:

**U.T. LEWIS CREEK** **BURKESVILLE**

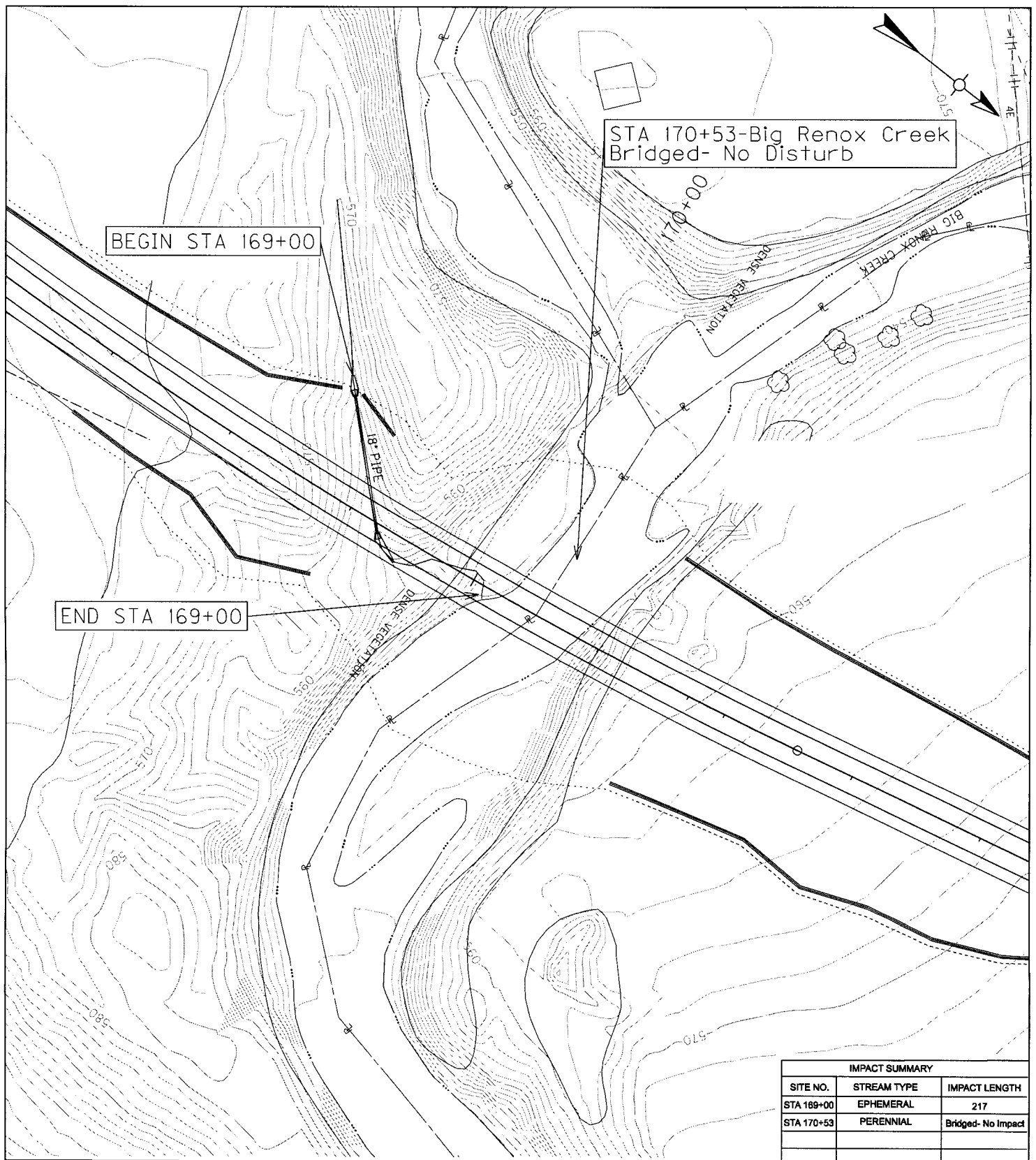
STREAM NAME: AT OR NEAR:

**CUMBERLAND** **KENTUCKY**

COUNTY OF: STATE OF:

8-158.10 19 of 21

MILE POINT: ITEM NO.: SHEET NO.:



IMPACT SUMMARY		
SITE NO.	STREAM TYPE	IMPACT LENGTH
STA 169+00	EPHEMERAL	217
STA 170+53	PERENNIAL	Bridged- No Impact

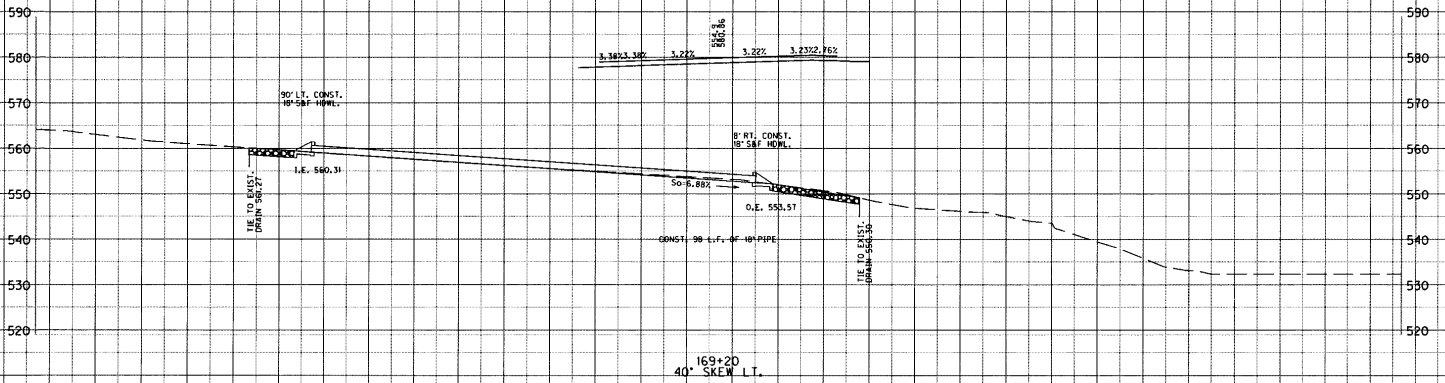
~NOTES~

Stream Impact STA 169+00  
Stream Impact STA 170+53

SCALE 1" = 100'

APPLICATION BY  
**KENTUCKY**  
TRANSPORTATION CABINET  
DEPARTMENT OF HIGHWAYS

STA 166+07 TO 174+37 IMPACT PLAN	
PROPOSED ACTIVITIES:	
U.T. BIG RENOX CREEK	BURKESVILLE
STREAM NAME:	AT OR NEAR:
CUMBERLAND	KENTUCKY
COUNTY OF:	STATE OF:
MILE POINT: 8-158.10	20 of 21
ITEM NO.:	SHEET NO.:



~NOTES~

Stream Impact STA 169+00

SCALE 1" = 10'

APPLICATION BY  
**KENTUCKY**  
 TRANSPORTATION CABINET  
 DEPARTMENT OF HIGHWAYS

STA 169+00 IMPACT PLAN

PROPOSED ACTIVITIES:

U.T. BIG RENOX CREEK  
 STREAM NAME:

BURKESVILLE  
 AT OR NEAR:

CUMBERLAND  
 COUNTY OF:

KENTUCKY  
 STATE OF:

MILE POINT:

8-158.10  
 ITEM NO.:

21 of 21  
 SHEET NO.:

## **Mitigation**

### **Streams**

Tables 1 and 2 list all stream impacts, and whether mitigation is required. \$48,240 in-lieu fee is proposed for mitigation for Site Sta 103+75.

### **Man-Made Open-Water Ponds**

Table 4 (following pages) lists all pond impacts, and the corresponding estimated impact to the streams which the ponds replaced.

### **Wetlands**

One wetland will be impacted by the project. Table 3 lists that impact. \$77,700 in-lieu fee is proposed for mitigation for wetland Site Sta. 102+90.

### **Total In-Lieu Fee**

\$125,940.00

### **Appendices**

Appendix A: Wetland Determination Data Forms

Appendix B: Sites Requiring Mitigation: Photos, Location Map, RBP Scores

Table 1: KY 61 - Cumberland County: Item No. 8-158.10 - Stream Impact Summary

Site/ Station	14-HUC	Stream Name	Lat-Long	Sheet No.	Impact Category	Flow Regime	Permit Type	Watershed (acres)	Stream Impact (ft)	Stream Impact (acres)	Stream Impact (cubic yards)	RBP Score	Quality	Rifle Pool Complex	Mitigation Required
70-45	5130103100010	U.T. Lewis Creek	N 36 30 41.1 E W 36 32 54	73	culvert channel	Int	NW14	206.5	756	0.072	143.3	NA	NA	NO	NO
94-30	5130103200010	U.T. Lewis Creek	N 36 30 39.1 E W 36 35 57.1	8	channel change	Epib	SW15	4.3	131	0.007	1.6	NA	NA	NO	NO
96-77	5130103300010	Lewis Creek	N 36 31 02.8 E W 36 36 12.9	8	Bridge & No Impact	Per	None	1427.7	0	0.000	0.0	NA	NA	NO	NO
107-99	5130103400010	wetland (see Table 2)	N 36 31 21.1 E W 36 38 12.6	13	fill			43.5							YES
103-73	5130103500010	U.T. Lewis Creek	N 36 31 04.3 E W 36 37 35	5, 6, 7	2 culverts diverted channel	Int	NW14	346.0	302	0.108	308.8	71	Pass	NO	YES
109-50	5130103600010	U.T. Lewis Creek	N 36 31 12.5 E W 36 36 06.7	8	channel change	Epib	SW15	77.8	360	0.014	11.4	NA	NA	NO	NO
113-36	5130103700010	U.T. Lewis Creek	N 36 31 09.1 E W 36 35 01.1	9	channel change	Epib	SW14	6.4	112	0.007	4.0	NA	NA	NO	NO
112-43	5130103800010	U.T. Lewis Creek	N 36 31 06.9 E W 36 37 02.7	9	channel change	Epib	SW15	0.34	174	0.001	0.2	NA	NA	NO	NO
110-94	5130103900010	U.T. Lewis Creek	N 36 31 06.8 E W 36 37 02.9	9	channel change	Epib	NW15	9.8	167	0.007	4.4	NA	NA	NO	NO
123-94	5130103900010	U.T. Lewis Creek	N 36 31 06.8 E W 36 37 02.9	10	channel change	Epib	SW14	3.6	123	0.006	2.1	NA	NA	NO	NO
124-43	5130104000010	U.T. Lewis Creek	N 36 31 04.4 E W 36 37 04.8	10, 11	culvert diverted channel	Epib	NW14	15.4	164	0.013	18.5	NA	NA	NO	NO
129-00	5130104100010	U.T. Lewis Creek	N 36 31 06.7 E W 36 37 02.7	10, 12	culvert diverted channel	Epib	NW14	1.4	143	0.005	1.7	NA	NA	NO	NO
131-60	5130104200010	U.T. Lewis Creek	N 36 31 08.7 E W 36 37 03.7	10, 14	culvert diverted channel	Epib	SW14	1.7	124	0.004	1.6	NA	NA	NO	NO
132-91	5130104300010	U.T. Lewis Creek	N 36 31 09.0 E W 36 37 04.0	12	channel change	Epib	SW14	1.2	126	0.006	1.8	NA	NA	NO	NO
141-30	5130104400010	U.T. Lewis Creek	N 36 31 09.1 E W 36 37 04.1	13, 16	culvert diverted channel	Epib	SW14	12.3	144	0.011	8.1	NA	NA	NO	NO
143-51	5130104500010	U.T. Lewis Creek	N 36 31 09.1 E W 36 37 04.1	15, 15	culvert diverted channel	Epib	SW14	5.2	133	0.006	1.2	NA	NA	NO	NO
147-00	5130104600010	U.T. Lewis Creek	N 36 31 09.1 E W 36 37 04.1	15, 16	culvert diverted channel	Epib	SW15	10.5	133	0.008	1.7	NA	NA	NO	NO
148-70	5130104700010	U.T. Lewis Creek	N 36 31 09.1 E W 36 37 04.1	15, 16	culvert diverted channel	Epib	SW14	5.3	143	0.017	8.2	NA	NA	NO	NO
158-00	5130104800010	pond? (see also Table 4)	N 36 31 12.6 E W 36 38 11.4	16	fill	Epib	SW14	7.8	254	0.031		NA	NA	NA	NA
164-00	5130104900010	U.T. Big Rocks Creek	N 36 31 28.4 E W 36 37 59.0	16, 21	culvert diverted channel	Epib	SW14	1.8	217	0.006	1.3	NA	NA	NO	NO
170-33	5130105000010	Big Rocks Creek	N 36 31 29.6 E W 36 38 03.5	20	Bridge & No Impact	Per	None	16280.0	0	0.000	0.0	NA	NA	NO	NO

Table 2: KY 61 - Cumberland County: Item No. 8-168.10 - Stream Impact and Mitigation Summary

Before Impact									After Impact								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Site #	Stream Type	Type of Impact	Average of Impact	Watershed size in acres	Initial RBP Score	Initial Quality	Impact Length	Ratio	Debit	Mitigation Required?	Predicted RBP score	Predicted Quality	Final Length	Final Ratio	Credits	Balance	In-Lieu Fee
70+65	Int	culvert in/outlet channel	0.072	396.8	NA	NA	256	NA	0	No	0	NA	0	0.00	0	0	\$0.00
94+90	Eph	channel change	0.007	4.4	NA	NA	131	NA	0	No	0	NA	0	0.00	0	0	\$0.00
96+71	Per	Bridged- No Impact	0.000	1427.2	NA	NA	0	NA	0	No	0	NA	0	0.00	0	0	\$0.00
103+75	Int	2 culverts in/outlet channel	0.108	346.0	73	Poor	402	1.00	402	Yes	0	NA	0	0.00	0	-402	\$48,240.00
109+56	Eph	channel change	0.014	17.8	NA	NA	160	NA	0	No	0	NA	0	0.00	0	0	\$0.00
113+36	Eph	channel change	0.007	6.4	NA	NA	112	NA	0	No	0	NA	0	0.00	0	0	\$0.00
115+48	Eph	channel change	0.001	0.0	NA	NA	174	NA	0	No	0	NA	0	0.00	0	0	\$0.00
119+98	Eph	channel change	0.007	7.8	NA	NA	107	NA	0	No	0	NA	0	0.00	0	0	\$0.00
123+94	Eph	channel change	0.006	3.6	NA	NA	128	NA	0	No	0	NA	0	0.00	0	0	\$0.00
125+45	Eph	culvert in/outlet channel	0.018	35.4	NA	NA	164	NA	0	No	0	NA	0	0.00	0	0	\$0.00
129+80	Eph	culvert in/outlet channel	0.005	1.4	NA	NA	143	NA	0	No	0	NA	0	0.00	0	0	\$0.00
131+60	Eph	culvert in/outlet channel	0.004	1.2	NA	NA	134	NA	0	No	0	NA	0	0.00	0	0	\$0.00
132+21	Eph	channel change	0.006	3.2	NA	NA	126	NA	0	No	0	NA	0	0.00	0	0	\$0.00
141+30	Eph	culvert in/outlet channel	0.011	13.3	NA	NA	144	NA	0	No	0	NA	0	0.00	0	0	\$0.00
144+50	Eph	culvert in/outlet channel	0.006	5.2	NA	NA	103	NA	0	No	0	NA	0	0.00	0	0	\$0.00
147+60	Eph	culvert in/outlet channel	0.008	10.5	NA	NA	115	NA	0	No	0	NA	0	0.00	0	0	\$0.00
148+60	Eph	culvert in/outlet channel	0.017	4.1	NA	NA	341	NA	0	No	0	NA	0	0.00	0	0	\$0.00
(158+00)	Eph	fill	0.017	7.8	NA	NA	258	NA	0	No	0	NA	0	0.00	0	0	\$0.00
169+00	Eph	culvert in/outlet channel	0.008	1.8	NA	NA	217	NA	0	No	0	NA	0	0.00	0	0	\$0.00
170+53	Per	Bridged- No Impact	0.000	16080.0	NA	NA	0	NA	0	No	0	NA	0	0.00	0	0	\$0.00

Table 3: KY 61 Cumberland County: Item No. 8-158.10 - Wetland Impact Summary

Sheet No.	Project Location	Consent	Impacted	Permit Type	Impacted Area (Acres)	In-lieu Fee (\$/Ac)
5 & 8	STA 102+90	PEM	No	Individual	2.59	\$77,700.00
TOTAL (jurisdictional)					2.59	\$77,700.00

\* In-lieu fee calculated as product of impacted area, 2:1 ratio, 0.2 for temporary loss, \$30,000 per acre

**Table 4: KY 61 - Cumberland County: Item No. 8-158.10 - Pond Impact Summary**

Site/ Station	HUC #	Name	Lat-Long	Sheet No.	Impact Category	Permit Type	Pond Impact (acres)	Predicted Stream Impact	Cowardin
STA 158+00 (Pond)	5130103190070	POND at former UT Big Reno Creek	N 37.904713; E -85.473249	19	Culvert & Inlet/Outlet Channel	NW 14	0.36	see Table 1. STA 158+00 (Pond)	Pond

**Appendix A:**

**Wetland Determination Data Forms**

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
**(1987 ACOE Wetland Delineation Manual)**

<b>Project Site:</b>	KY 61 - Wetland STA 102+90	<b>Date:</b>	12/20/06
<b>Applicant/Owner:</b>	KYTC	<b>County:</b>	Cumberland
<b>Investigators:</b>	MTM, JNH	<b>State:</b>	KY
<b>Do Normal Circumstances exist at the site?</b>	No	<b>Community ID:</b>	STA 102+90
<b>Is the site significantly disturbed (Atypical Situation)?</b>	Yes	<b>Transect ID:</b>	
<b>Is the area a Potential Problem Area? (If yes explain on reverse)</b>	Yes	<b>Plot ID:</b>	

**VEGETATION**

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1	Carex sp.	Herb	FACW	9			
2				10			
3				11			
4				12			
5				13			
6				14			
7				15			
8				16			
<b>Percent of Dominant Plant Species that are OBL, FACW+, FACW, FACW-, FAC+, or FAC:</b>							100 %
<b>Remarks:</b>							

**HYDROLOGY**

Recorded Data (Describe in Remarks)		WETLAND HYDROLOGY INDICATORS	
Stream, Lake or Tide Gauge		<i>Primary Indicators</i>	
	Aerial Photographs	✓	Inundated
	Other (Describe in Remarks)	✓	Saturated in Upper 12 Inches
✓	No Recorded Data Available		Water Marks
			Drift Lines
Field Observations:		✓	Sediment Deposits
2-3	Depth of Surface Water (Inches)		Drainage Patterns in Wetlands
3	Depth to Free Water in Pit (Inches)	<i>Secondary Indicator (2 or more required)</i>	
0	Depth of Saturated Soil (Inches)	✓	Oxidized Root Channels in Upper 12 Inches
			Water-stained Leaves
			Local Soil Survey Data
		✓	FAC-Neutral Test
			Other (Explain in Remarks)
<b>Remarks:</b> some areas inundated; others not inundated but saturated			

## SOILS

<b>Map Unit Name (Series &amp; Phase):</b>	Newark	<b>Drainage Class:</b>			
<b>Taxonomy (Subgroup):</b>		<b>Field Observations Confirmed Mapped type?</b>		No	
<b>Profile Description:</b>					
<b>Depth (Inches)</b>	<b>Horizon</b>	<b>Matrix Color (Munsell Moist)</b>	<b>Mottle Colors (Munsell Moist)</b>	<b>Mottle Abundance/Contrast</b>	<b>Texture, Concretions, Structure, Etc.</b>
0-10		5Y 4/2		some	silt clay
<b>Hydric Soil Indicators</b>					
	<b>Histol</b>		<b>Concretions</b>		
	<b>Histic Epipedon</b>		<b>High Organic Content in Surface Layer in Sandy Soils</b>		
	<b>Sulfidic Odor</b>		<b>Organic Streaking in Sandy soils</b>		
✓	<b>Aquic Moisture Regime</b>		<b>Listed on Local Hydric Soils List</b>		
	<b>Reducing Conditions</b>		<b>Listed on National Hydric Soils List</b>		
✓	<b>Gleyed or Low-chroma Colors</b>		<b>Other (Explain in Remarks)</b>		
<b>Remarks:</b>					

## WETLAND DETERMINATION

<b>Is Hydrophytic Vegetation Present?</b>	Yes	<b>Is Sampling Point Within a Wetland?</b>	Yes
<b>Is Wetland Hydrology Present?</b>	Yes		
<b>Are Hydric Soils Present?</b>	Yes		
<b>Remarks:</b> palustrine Emergent wetland channelization of Lewis Creek created wetland			

**Location of Sampling Point:** N 36.812391; E -85.368326

**Appendix B:**

**Sites Requiring Mitigation:  
Site Location, Photo, and RBP Scores**





**KENTUCKY TRANSPORTATION CABINET  
MEMORANDUM OF AGREEMENT  
SUBMITTED TO THE ADVISORY COUNCIL ON HISTORIC PRESERVATION  
PURSUANT TO 36 CFR Part 800.6(a)  
Improvement of KY 61 from Jones Chapel to Burkesville  
Cumberland County, Kentucky  
Item No 8-158.20**

**WHEREAS**, the United States Army Corps of Engineers (COE) and the Kentucky Transportation Cabinet (KYTC) have determined that the improvement of KY 61 in Cumberland County, Kentucky (The Project) will result in an effect upon Site 34 (Cu-219), a property determined eligible by consensus agreement for inclusion in the National Register of Historic Places under Criterion C; and

**WHEREAS**, the COE has consulted with the Kentucky State Historic Preservation Officer (SHPO) pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act, as amended, (16 U.S.C. 470f); and

**WHEREAS**, the KYTC will provide funding for The Project; and

**WHEREAS**, the COE has assumed the responsibilities of lead Federal agency pursuant to 36 CFR Part 800.2 (a) (2) and has determined that The Project may effect properties eligible for listing in the National Register of Historic Places (NRHP), and has consulted with the Advisory Council on Historic Preservation (ACHP) pursuant to 36 CFR 800.6 of the regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470F); and

**NOW, THEREFORE**, the COE and Kentucky SHPO agree that the Project shall be accomplished in accordance with the following stipulations in order to take into account the effect of the undertaking on an historic property.

**Stipulations**

The KYTC will ensure that the following measures are undertaken and completed.

**I. Recordation**

- A. Prior to demolition of the structure, the following procedures shall be undertaken and completed by KYTC:
1. The SHPO will be advised and consulted.
  2. In order to preserve a record of its history and appearance, the bridge will be recorded by a SHPO approved, professional architect, historian or architectural historian, experienced in the documentation of engineering resources. State Level Documentation is specified, not to exceed \$5000.00, and will include:

- a) A Kentucky Historic Resource Individual Survey form (KHC 91-1) **and** Intensive Survey Form (KHC 91-3), completed or updated as appropriate;
- b) Utilizing an archival search and gathering specific historic information from appropriate data sources, a brief report describing the history and architectural significance of the structure, a Cumberland house, and history of the area or neighborhood will be prepared to accompany the inventory form.
- c) The structure will be photographically documented with a series of digital color images, and black and white photographs showing its architectural and structural elements, surrounding environmental setting, views from each elevation and any other significant, character defining details. Photographs should be printed on 5" x 7" archival quality, acid free paper. Each photo will be labeled with the date, site number, direction, and subject. Photographs, a CD of the digital images, and all negatives shall be provided in notebook sleeves and submitted in a three-ring binder.
- d) If available, a copy of the original construction plans and details and any other field plans or records maintained about the structure shall be provided. If original plans are not available, measured drawings of the structure will be prepared by an architect or architectural historian experienced in producing measured drawings. This work shall be completed in accordance with Historic American Engineering Record (HAER) guidelines
- e) The completed documentation will be submitted by the KYTC to the SHPO for review and acceptance. Upon notification of SHPO acceptance, the KYTC will provide a copy to a local agency, archive, university or preservation group designated by the SHPO. A copy will also be provided to the State Department of Libraries and Archives.

## **II. Interpretive Park/Pull-Off and Signage**

- A. A roadside interpretive park/pull-off shall be constructed in the vicinity of America's First Oil Well just north of the existing Big Renox Creek bridge. The pull-off shall provide 3 to 5 parking spaces. Construction of the overlook shall require approximately a 100' x 50' area. It shall be paved and curbed and striped for parking spaces. It shall have a protective median to separate the pull-off from the main road. Historic signage shall be erected to commemorate the area and the oil well. No more than \$15,000 shall be expended for the construction of the pull-off. Interpretive signage may add a nominal cost to the overall

budget. The State Historic Preservation Office will be consulted during the design of the pull-off and shall be provided an opportunity and to review and comment on the final proposed plans and signage. The Cumberland County Fiscal Court shall also be granted an opportunity to comment on the proposed plans and signage.

**III. Professional Qualifications**

- A. The KYTC shall ensure that all historic preservation work undertaken and completed pursuant to this MOA is accomplished by or under the direct supervision of a preservation professional meeting the qualifications set forth in the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 FR 44716-42). The KYTC, through consultation with the SHPO, shall assure that the preservation professional selected to complete the work has been approved for such work by the SHPO.

**III. Resolution of Disagreements**

- A. Should the SHPO object within 30 days to any plans, specifications, reports or other actions submitted or undertaken pursuant to this Memorandum of Agreement, the KYTC shall consult with the SHPO to resolve the objection. If the KYTC determines that the objection cannot be resolved, the KYTC shall request the further comments of the Advisory Council pursuant to 36 CFR 800.6(b). Any Advisory Council comment provided in response to such a request will be taken into account by the KYTC in accordance with 36 CFR 800.6(c)(2) with reference only to the subject of the dispute; the KYTC's responsibility to carry out all actions under this Memorandum of Agreement that are not the subjects of the dispute will remain unchanged

Page 4

KY 61; Cumberland County

Item No.8-158.20

**Execution of this Memorandum of Agreement and implementation of its terms evidence that KYTC has afforded the Advisory Council an opportunity to comment on the Project and its effect on historic properties, and that KYTC has taken into account the effects of the undertaking on historic properties.**

**KENTUCKY HERITAGE COUNCIL**

BY: Don M. Neamy 12/06/07  
State Historic Preservation Officer Date

**CONCURRING PARTIES:**

**KENTUCKY TRANSPORTATION CABINET**

BY: Bill Nighbert 11/01/07  
Bill Nighbert, Secretary, Kentucky Transportation Cabinet Date

**APPROVED AS TO FORM AND LEGALITY  
KENTUCKY TRANSPORTATION CABINET**

BY: Jack Shupp 12/27/07  
General Counsel Date



U.S. Fish & Wildlife Service  
Kentucky Ecological Services Field Office

U.S. Fish & Wildlife Service  
330 West Broadway, Rm 265  
Frankfort, KY 40601  
Phone: 502-695-0468  
Fax: 502-695-1024

Endangered, Threatened, & Candidate  
Species in CUMBERLAND County, KY

Group	Species	Common name	Legal* Status	Known** Potential	Special Comments
Mammals	<i>Myotis sodalis</i>	Indiana bat	E	P	
	<i>Myotis grisescens</i>	gray bat	E	K	
Mussels	<i>Epioblasma o. obliquata</i>	purple catspaw pearlymussel	E	K	
	<i>Villosa trabilis</i>	Cumberland bean pearlymussel	E	K	
	<i>Cyprogenia stegaria</i>	fanshell	E	K	
	<i>Epioblasma capsaeiformis</i>	oyster mussel	E	K	
	<i>Epioblasma brevidens</i>	Cumberlandian combshell	E	K	
	<i>Pleurobema clava</i>	clubshell	E	P	
	<i>Plethobasus cyphus</i>	sheepnose	C	P	
	<i>Ptychobranhus subtentum</i>	fluted kidneyshell	C	P	
	<i>Pegias fabula</i>	littleneck pearlymussel	E	P	

NOTES:

\* Key to notations: E = Endangered, T = Threatened, C = Candidate, CH = Critical Habitat

\*\*Key to notations: K = Known occurrence record within the county, P = Potential for the species to occur within the county based upon historic range, proximity to known occurrence records, biological, and physiographic characteristics.



U.S. Fish & Wildlife Service  
Kentucky Ecological Services Field Office

U.S. Fish & Wildlife Service  
330 West Broadway, Rm 265  
Frankfort, KY 40601  
Phone: 502-695-0468  
Fax: 502-695-1024

Endangered, Threatened, & Candidate  
Species in CUMBERLAND County, KY

Group	Species	Common name	Legal* Status	Known** Potential	Special Comments